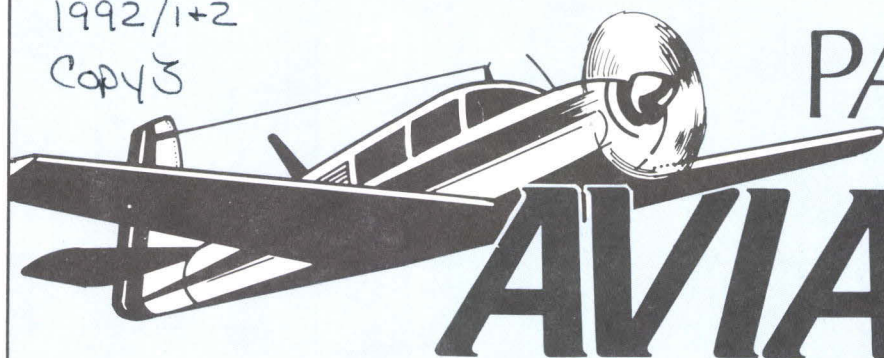


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STATE DOCUMENTS

Volume 44, Number 1

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January/February, 1992

AIP Funds -- Who's Got the Money Now?

Additional funds may be available

Airport improvement projects are vital to all people involved in aviation, especially in South Carolina where so many airports are general aviation airports and do not receive enplanement funds.

In lieu of these facts, the South Carolina Aeronautics Commission Airport Development section has sent each airport information regarding possible additional funding for airports.

"A few days ago," said Bill Walls of Airport Development, "I mailed to all airports an 'ALERT' bulletin from AAAE which highlights supplemental airport im-

provement funding.

"With your help," added Walls, "we may be able to get additional AIP funding for construction projects by writing your House and Senate Delegations to enact emergency supplemental AIP funding legislation.

Walls recommended that "Airports be prepared with ready to bid contract proposals in the event Congress passes economic recovery legislation which includes additional AIP money for rapid disbursement."

In part, the AAAE "ALERT" stated, "Efforts are underway in a

number of quarters on Capitol Hill to develop legislation to address economic recovery — additional AIP funding for construction projects is a part of several of those proposals. For example, H.R.3544, introduced by Representative Jamie Whitten (D-Miss), contains \$250 million in additional AIP funds and S.2137, introduced by Senator Ted Kennedy (D-Mass.), contains \$1 billion in additional AIP funds. Other proposals containing AIP funds are in various stages of drafting.

"It is likely that any economic
See Page 6, AIP Funding

Southeast AAAE to Meet in Columbia

The Southeast Chapter of the American Association of Airport Executives is hosting their annual conference March 22-24 in Columbia.

The conference which highlights aviation issues and trends will be held at the Sheraton Hotel and Conference Center on I-20 and Bush River Road.

Dr. Barry Asmus, an Economist with the National Center for Policy Analysis, will kick-off the Monday's session. His talk "Economic Challenges of the 90's: What in the World is Going On?" will delight and inform you.

The two-day business program

features many discussion workshops including:

- ◆ Current General Aviation issues
- ◆ Airport food/beverage and car rental concession issues
- ◆ Operating a successful tour program
- ◆ When an airplane crashes
- ◆ Passenger Facility Charges

In addition, experts in various fields will lead panel discussions on federal and state aviation issues and "Airport Noise — What Should Be Done Now."

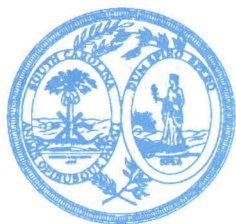
While the day-time events keep us informed, the evening events will keep us entertained. A special Jungle Reception and Safari Buffet

at Riverbanks Zoo will bring convention participants to the new Aquarium-Reptile Complex on Tuesday and the President's Reception and Island Shag Party tops off the Wednesday's program.

Spouses will delight in a rafting trip down the Saluda River, browse for antiques down the Congaree Vista and lunch at a local bistro.

The host airport, Columbia Metropolitan Airport, has many exciting events planned and many surprises for the Southeast Chapter conference you won't want to miss.

◆ If you want more information please contact Donna Seigler at (803) 822-5010.



PALMETTO AVIATION is an official publication of the South Carolina Aeronautics Commission. It is designed to inform members of the aviation community, and others interested in aviation, of local developments in aviation and aviation facilities, and to keep readers abreast of national and international trends in aviation.

The Aeronautics Commission is a state agency created in 1935 by the South Carolina General Assembly to foster and promote air commerce in the state.

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From the Directors Desk

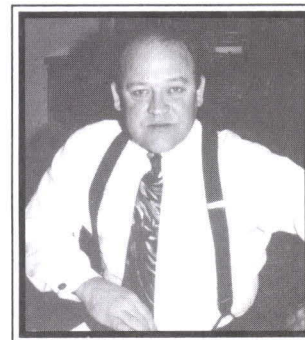
Back in the Saddle

The holidays are traditionally a rough time for aviation. The flying is light, our minds are on families, celebrations, and the like. Then, immediately after the first of the year, we return to hit it hard once again, fully refreshed, totally committed, but maybe a bit short of currency in our aircraft or job. Many aviation units recognize this and start the new year off with a "Back in the Saddle" program where we momentarily return to the basics, give ourselves a good once over in basic airmanship, and then proceed to the challenges of the new year.

I'm a big believer in these periodic looks in the mirror. A chance to privately critique yourself is an opportunity to make yourself better. When was the last time you shot an ILS approach solely for the purpose of training: a chance to look at how close you remain on course, glide slope, and speed. Air navigation is built on standard and half-standard rate turns. Have you ever timed your turns? It will really give you some humility. Think about the last flight plan you filed. Did you really plan the flight or did you just remember the old heading and distance and leave the rest up to Center. Remember, radios do fail, and then the whole ball game changes.

The same can be said for airports. It's hard to focus on the basics when you are faced with a rough economy and still trying to show the county or commission a profit. Nonetheless, an accident will spoil your whole day. Have

you recently taken your car out on the field and driven the runway and taxiways. What's their condi-



John Park

tion? What's your signage look like? Has the grass and dirt started to get in the way of the lighting? How about the surrounding trees? They have a habit of growing right into the clear zone.

What about the land side? From the passengers' point of view, is the airport serving its purpose? How is the parking lot. What does the landscape look like? How is the terminal in terms of cleanliness and repair? Is this the first impression our county or city wants to give to a possible investor?

The first of the year is a great chance to look at ourselves and review what we are trying to do. It doesn't cost us anything and gives us the chance to not pass over the obvious. I keep remembering the old phrase: 'When you're up to your tail end in alligators, it's difficult to remember your primary objective was to drain the swamp.'

A momentary return to the basics will keep you focused on the swamp you are trying to drain, and keep the alligators at bay.

John Park

South Carolina Aeronautics Commission Offices are at Columbia Metropolitan Airport.
Mailing Address: Post Office Drawer 280068, Columbia, South Carolina, 29228.
Phone: (803) 822-5400, or 1-800-922-0574.

Greenville Downtown, Ridgeland and Rock Hill Receive Funds

Greenville Downtown Airport, Ridgeland Airport in Jasper County, and Rock Hill Municipal Airport received funding for improvement projects at the State Aeronautics Commission meeting in Columbia, December 12.

The State Aeronautics Commission held their regular monthly meeting and approved more than \$211,000 for airport projects.

When completed, the projects will generate more than \$1.9 million when combined with local and federal funding.

Commission Chairman Jim Hamilton announced the state allocations:

◆ **Greenville Downtown Airport** -- \$141,930.54 to complete interior and exterior renovation of the Greenville Downtown Airport ter-

minal building which was originally constructed in 1953. This airport improvement project was funded with 11 percent state funds, and 89 percent local funds;

◆ **Ridgeland Airport in Jasper County** -- \$4,443.18 to clear and remove obstructions located on airfield property, relocate security fencing and stymie vegetation growth as needed. This project is funded with 50 percent state and local sources;

◆ **Rock Hill Municipal Airport** -- \$65,295 to remove obstructions -- trees, powerlines and hills, and complete the installation of localizer/non-directional beacon. This project is funded with a 90 percent Federal Aviation Administration grant, and five percent of local and state funds.

Goodbye Good Friend

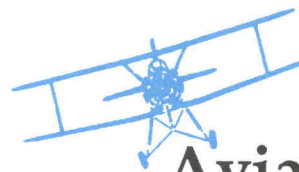
With the new year comes new legislation regarding state boards and commissions. The SC Aeronautics Commission will truly miss working with Rep. Olin Phillips, who has served as a good friend to aviation and as vice chairman of the Commission for many years.



Warbird of the Year Honors Enola Gay Pilot

South Carolina Warbirds will honor Gen. Paul Tibbets, famed pilot of the Enola Gay, as "Warbird of the Year" on Leap Day, Feb. 28, at 7 p.m. at Wilson World in Spartanburg. Previous recipients Col. Robert Morgan, Ensign George Gay and Gen. Robert Scott are expected to attend.

The cost is \$25 for Warbirds and \$30 for non-members. For reservations call Hubert Hendrix at 582-4511.



Aviation Calendar

February 2

Breakfast Club
Aviation Associates
Columbia Metropolitan

February 16

Breakfast Club
Alan Smoak's Airport
Do-Little Field
(near St. Matthews)

February 26-28

North Carolina Airports
Association
Pinehurst Resort
(919) 341-4333

February 28

Warbird of the Year
Spartanburg, SC
582-4511

March 1

Breakfast Club
Edisto Aviation
Bamberg County Airport

March 15

Breakfast Club
Dillon County Airport

March 29

Breakfast Club
Aiken Municipal Airport

April 5-11

Sun 'N Fun Fly-In
Lakeland, FL

April 12

Breakfast Club
Dorchester County Airport
Summerville

April 17

Doolittle Raiders
Anniversary
Doolittle Ball
Carolina Coliseum

April 18

Doolittle Ceremony &
B-25 Fly-Over
State Museum



Get A Glimpse From Aviation's Past

Winter months are sometimes filled with long, grey days and cold afternoons. But you don't have to fill those bitter days with boring events. One bright spot that appeals to young, old and the in-between is the State Museum.

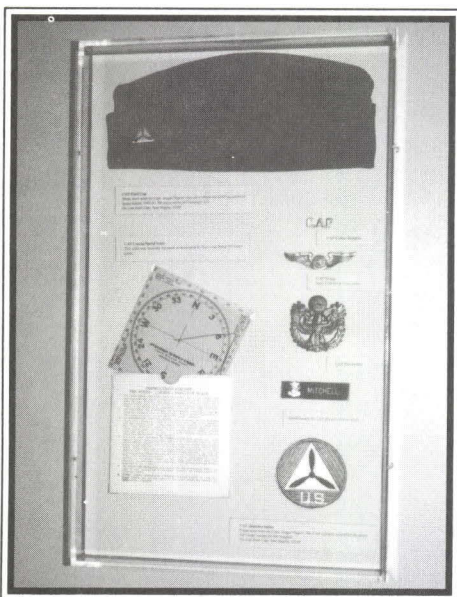
The State Museum in Columbia is just a short flight away from your airport.

From now to December, the State Museum has a collection no aviator or WWII buff should miss.

"The Palmetto State Goes to War: World War II and South Carolina" is an exhibit that will take you back 50 years to Doolittle Raiders and to Link Trainers.

"The exhibit focuses on the difficulties confronted by folks on the homefront, rather than the battles fought by soldiers 'over there,'" said Fritz Hamer, State Museum Curator of History.

Hamer added that the exhibit "examines the war's impact on the state and how the people of South Carolina contributed to the war effort through sacrifice and organization."



This display of Civil Air Patrol items showed their WWII participation on the homefront.

The exhibit begins with an account of South Carolina's economic situation before the war with a look inside a typical dining room complete with table cloth and radio.

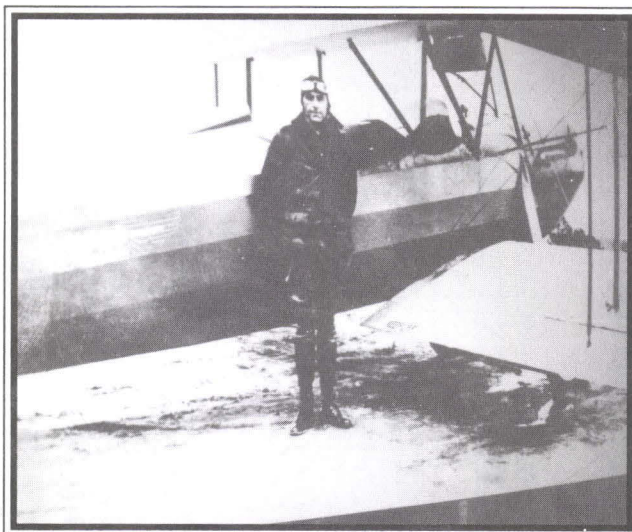
As the state slowly recovered from the Great Depression, said Hamer, "Agriculture was picking up to some degree, and the Charleston Navy Yard was getting more federal money to upgrade its production facilities and build new ships."

As world events unfolded, South Carolina responded. Hamer said the exhibit focuses on several topics South Carolinians would be familiar with such as the creation and development of military training facilities in Spartanburg, Columbia and Beaufort; the development of the Charleston Navy Yard; the impact of rationing and restrictions on entertainment and sports and the impact of German prisoner of war camps in the state.

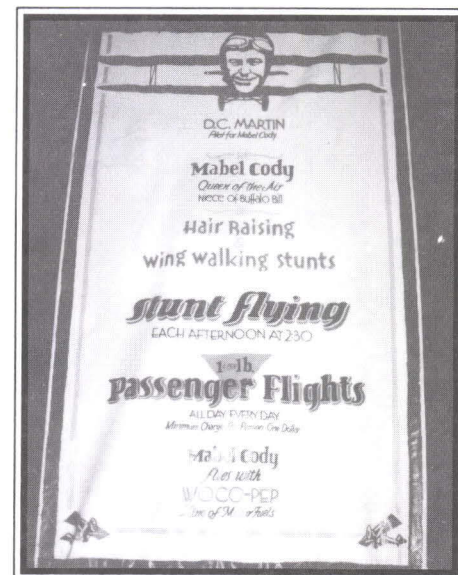
While Camp Jackson and Paris Island were built around WWI, added the curator, their budgets had been depleted and not until the 1930's were their budgets increased. Training began at Camp Croft, near Spartanburg, in 1941.

Each base contributed significantly to the economic and demographic impact of the area.

Charleston was a different story. It was an important shipping port and the navy base made it equally vital for defense. Adding to the military and port personnel, were thousands of Navy Yard workers brought in to build ships. According to Hamer, "In 1940, Charleston's population was



Dexter Martin's photo, above, and this banner advertising Mabel Cody's Flying Circus, below, are just two of the exhibits on permanent display at the State Museum.

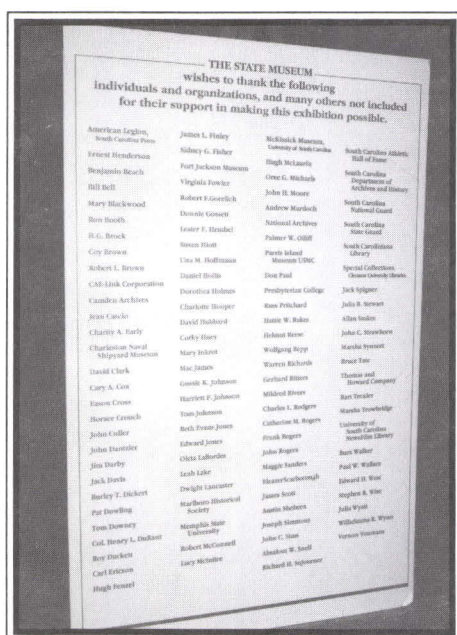


70,000. But by 1944 it had rocketed to nearly 200,000 and the city just didn't have the housing, transportation or recreational facilities to handle this explosion."

The exhibit features many items which were loaned to the museum for the Homefront Exhibit including photographs, uniforms, goggles, medals and a flight simulator.

Many photographs from Fort

By Visiting the State Museum Today



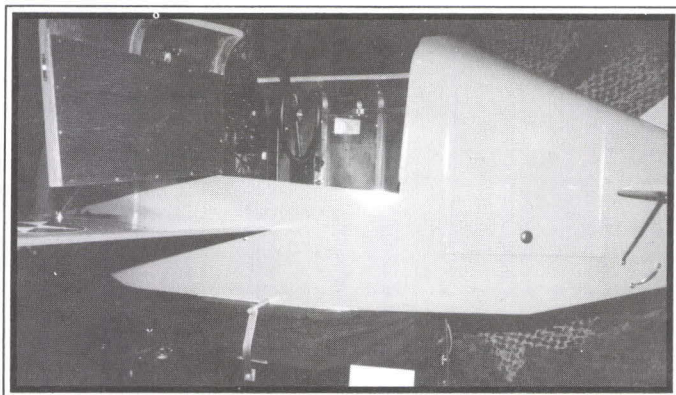
The WWII exhibit would not have been complete without the donations from many South Carolina aviators and their relatives.

Jackson show the preparation that went on. A link trainer which was used during the time to train pilots, was on loan from Lester Hembel, a long-time Saluda resident and aviator.

Hembel remembers both men and women operating the flight simulators at Congaree Air Station, which is now McEntire Air National Guard Base.

Hembel moved to South Carolina during WWII to teach flying to Naval Air Force cadet at the University of South Carolina.

The flight simulator resembles more of a child's toy airplane than the integral military educational device it was. Before that time, no simulator had been invented to give a pilot a safe, inexpensive way to teach basic flying techniques.



Hembel added that simulators like the one he gave to the State Museum were used as late as 1960.

The flight simulator donated by Hembel is particularly valuable to the museum's exhibit because it was used in the state. "This simulator bears the initials of the South Carolina Air National Guard," added Hamer.

The link trainer is not the only item donated for the exhibit, many patches, arm bands, flags, weapons, ration coupon books and political cartoons are all on display.

"We hope to show through this exhibit that the war was not won on the battlefield alone," said Hamer, "but by the millions of folks back home who supported the troops and did their part to help win the freedom that much of the world now enjoys."

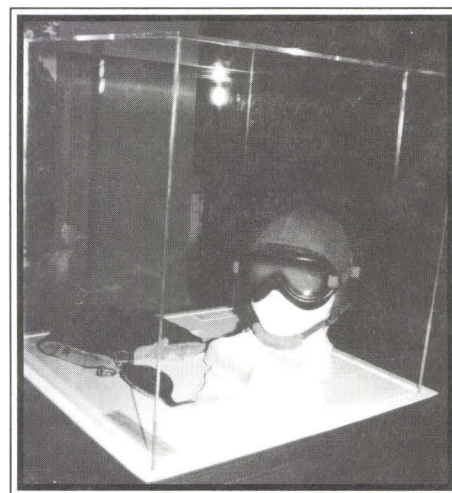
The State Museum is also home to a permanent aviation display which features a propeller from "Skunkie," a B-25 flown in 1944 and many mementos from Aviation Hall of Fame recipient Dexter Martin.

In addition, the remaining Doolittle Raiders will be coming to the State Museum for a ceremony commemorating the 50th Anniversary of the Tokyo raid in April.

Many exciting events are planned for their 50th Anniversary including the Doolittle Ball, Friday, April 17 at the Carolina Coliseum.

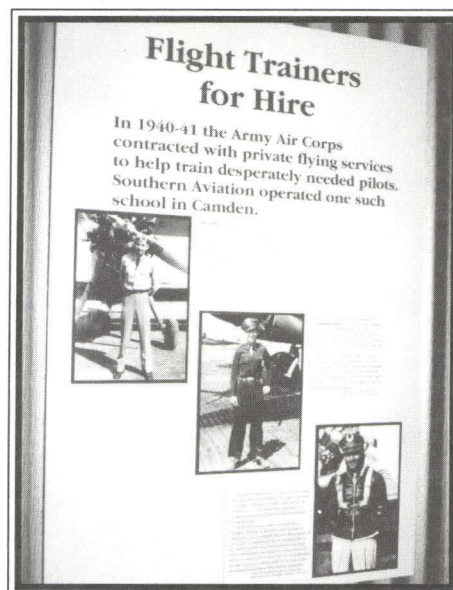
A dedication ceremony and fly-over with at least a half-dozen B-25 Bombers will be held at the State Museum on April 18.

This year will be a great year for aviation in South Carolina, to celebrate the past, revel in its present and ponder its wonderful future.



Aviator's goggles and scarf, above, are on display, as well as a series of photos on flight training schools like Southern Aviation in Camden, below.

This fully restored link trainer, far left, a donation by Lester Hembel of Saluda, is just one of many items vital to preserving South Carolina's rich aviation heritage.



US Air Express to Service Anderson County Airport

Anderson County Airport will begin to see more air traffic should see more activity now that a USAir Express has announced plans to begin commuter service.

USAir Express announced in January plans to start three flight a day to Charlotte beginning March 2.

USAir Express' chief executive officer Kenneth Gann told the Anderson Independent that "This is a big plus for Anderson. The Community has grown so much that it can justify this service."

Anderson County officials said an agreement was reached in mid-January for USAir Express to fly BAe-31 turboprop aircraft into the

airport. The airplanes can accommodate up to 19 passengers and will operate a morning, mid-day and late afternoon schedule.

The airline is expected to move an employee to Anderson as manager/marketing director. In addition, a few other employees may be needed to assist with operations.

USAir Express service is not the only commuter service to come to Anderson County Airport. Piedmont Commuter discontinued service at the airport in 1987 after the company suffered losses of nearly \$500,000 in its 18 months of service.

However, county officials admit that USAir Express should

succeed because it is should be able to avoid the same pitfalls Piedmont encountered.

Rusty Burns, of Anderson County's Planning and Development Board said, "USAir has a 90-percent arrival rate. They keep to their schedules."

Gann told the Anderson Independent that "We are reliable, on time and have competitive prices."

In addition, Gann said that Anderson was very attractive to his company due to recent improvements and an increase in air traffic.

USAir Express is a subsidiary of USAir which uses Charlotte Douglas International Airport as its hub.

Additional AIP Funds May Be Available

Continued from Page 1

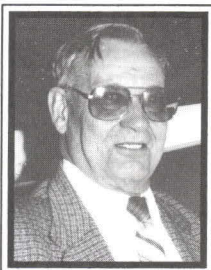
recovery legislation will be structured in such a way as to a) maximize job creation, and b) quickly infuse money into the economy. With this in mind, airports may want to take whatever steps are necessary to ensure that pending construction projects are in the ready-to-bid form.'

Airport officials and those interested should write to their House and Senate delegations, urging enactment of emergency supplement AIP funding legislation, and airports should be prepared with ready-to-bid construction projects in the event Congress passes economic recovery legislation which includes additional AIP money for rapid disbursement into the economy.

Bill Hobson Retires

In January, Bill Hobson of the SC Aeronautics Commission retired after six years of service. He was responsible for property accountability and inventory. Many of you knew him as SCAC Liaison for the Civil Air Patrol.

Happy retirement!



Hobson

Pickens County Airport Announces new FBO

The Pickens County Aeronautics Commission has selected a new fixed based operator who will manage operations at the Pickens County Airport.

W. "Bill" Elvus Barrett will direct the operations of flight instruction, maintenance, fueling, hangar and aircraft tie-downs in the initial period of operation. Future activities will include avionics repair station, 135 Charter service and other activities as the demand develops.

Barrett is a 20-year Air Force veteran, former supervisor with Duke Power Company and avionics shop manager for Shawnee Airlines. Most recently he has been a flight instructor at Pickens County Airport.

He is also a licensed FCC Communications Engineer, an FAA Certified Avionics Technician and a former member of the Oconee County Aeronautics Commission.

Larry Lawrence, Chairman of the Pickens County Aeronautics Commission, said Barrett was selected from a field of 11 applicants from six states.

The Pickens County Airport is in the midst of an airport improvement project which includes the addition of a turnaround at Runway 23 and an update of the Airport Layout Plan.

FYI From the FAA

Some Hard Facts About Soft Landings

According to Dick Hitt, FAA's Accident Prevention Program Manager, pilots should brush up on their landing skills periodically since it's an area where so many accidents occur. Hitt suggests that a good refresher for both old and new pilots is contained in the following FAA publication.

Each year between one-third and one-half of all general aviation accidents occur during the approach and landing phase of flight. Many of these accidents could be prevented by improving pilot skills and techniques, which in most cases means changing a few old habits.

Some causes of landing accidents are:

- ✱ High speed approach and touch down which results in "wheelbarrowing" and/or loss of directional control.
- ✱ High speed approach and touchdown resulting in overrun of the runway.
- ✱ Delayed touchdown or landing which produces similar results to the high speed touchdown.
- ✱ Failure to extend the landing gear before landing.
- ✱ Retracting the gear in rollout
- ✱ Loss of directional control.
- ✱ Striking obstructions around the landing area, i.e. wires, trees, snow drifts, crops, etc.
- ✱ Environmental hazards — snow and/or ice on the runway, soft runway surfaces, (unpaved), tall grass or weeds which hide surface conditions or hazards.

A few facts about flaps

Flaps are used to vary the lift and drag characteristics of the wing. Flap extensions during landings provides several advantages by:

- Producing greater lift and permitting lower landing speed.
- Producing greater drag, permitting a steep glide angle without airspeed increase.
- Reducing length of the landing roll.

The slower landing speed and ground roll results in less wear and tear on the brakes and tires, and yet permits effective directional control of the airplane.

If a swerve occurs during a high speed landing roll, the centrifugal forces imposed on the landing gear can exceed the aircraft design limits and result in structural failure. Considering the safety and economic benefits to be gained, pilots should use the maximum practical flap setting for each landing. Slower landing speeds reduce the probability of excessive stresses due to sideloads. Consider the advantages of

slower touchdown speed, shorter landing roll, less wear and tear on brakes and tires, less strain on the landing gear components and aircraft structure and most of all — easier directional control, then why not make full flap landing whenever practical.

The use of flaps during crosswind landing is a subject that is often misunderstood. The rules governing airplane design require that an airplane must be controllable in a 90 degree crosswind with a velocity of $0.2 V_{SO}$ (ref. FAR Part 23.233). V_{SO} is defined as the stall speed in the landing configuration; i.e., if V_{SO} is 50 knots, $0.2 \times 50 = 10k$. In this example, the airplane must be controllable in a 10k, 90 crosswind. Only you know your capability as a pilot, and under crosswind conditions as in other situations, you must allow a margin for safety. If information is not available, you can estimate the crosswind capabilities of an airplane while on final approach. With the flaps at the desired setting, establish the slip-type crosswind correction. If you are unable to maintain a runway centerline track with the fuselage aligned with the runway, then you do not have enough control to cope with the crosswind at the lower airspeed which will be involved in the roundout and landing roll. Therefore, discontinue the approach. Don't risk operating in conditions which exceed design safety limits of the aircraft or which exceed your own capabilities. It is better to look for a runway with favorable wind condition than to risk damaging your aircraft. Also, if the airplane is forced onto the ground at high speed, "wheelbarrowing" may lead to directional control problems and/or structural damage.

Flaps and weathervaning

Since the flaps extend down and below the wing, they present surface area for the wind to act upon. The further the flaps are lowered, the more surface area is presented to the wind; therefore, the greater the flap extension, the greater the effect of the wind on the aircraft during ground operations. The main landing gear may be considered as a point about which the airplane rotates when on the ground. Since the flaps are located behind the main wheels, and crosswind acting on the flaps increases the weathervaning tendency of the aircraft when on the ground. Flaps can also create a cushion of air under the wing on the side from which the wind is blowing. This cushion is "inflated" by the velocity of wind contributing more lift to that side. So, in

addition to the weathervaning tendency, the upwind wing will tend to rise, adding to the directional control problem. In strong, gusty conditions, it may be advisable to raise flaps after touchdown (unless restricted by the manufacturer). If you do so, make sure you have the flap control and not the landing gear control.

Wheelbarrowing

When the pilot permits the aircraft weight to become concentrated about the nosewheel during the takeoff or landing roll, a condition known as wheelbarrowing will occur. Wheelbarrowing may cause loss of directional control during the landing because braking action is ineffective and the airplane tends to pivot on the nosewheel, particularly in crosswind conditions.

One of the most common causes of wheelbarrowing during the landing roll is a simultaneous touchdown of the main and nose gear with excessive speed followed by the application of forward pressure on the elevator control. If wheelbarrowing is encountered, it may be advisable to promptly initiate a go-around. Wheelbarrowing will not occur if you achieve and maintain the correct landing altitude, touchdown at the proper speed, and gently lower the nosewheel as you lose speed on rollout. However, if you decide to stay on the ground rather than attempt a go-around or if you should lose directional control, close the throttle, and smoothly but firmly rotate to the landing altitude. Raise flaps to reduce lift and increase the load on the main wheels for better braking.

Follow these safety tips and improve your chances of making every landing a soft one: Line up with the center of the runway and stay lined up during approach, touchdown and rollout. Use the slip method of alignment with the centerline to determine whether the crosswind is too strong. If you can't hold the line you cannot land safely. Pick a land-no land point on the runway. If you see you are going to overshoot it, go around.

Use your checklist before every landing. If you don't, the item you over look may be the landing gear.

Determine runway conditions before you land.

Don't be too proud to abort your landing. Know your go-around procedures and don't hesitate to use them. Power-attitude-flaps-gear. Avoid making low, dragged-in approaches.



**SOUTH CAROLINA
AERONAUTICS COMMISSION**
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This Month. . . Inside Palmetto Aviation

- Columbia Metro Hosts Southeast AAAE Conference
- Visit the State Museum for a trip back in time
- New FBO at Pickens County Airport

...and much much more!

FAA Flight Standards District Office Moves



The FAA's Flight Standards District Office held an open house for their new location.

They are now in the Foreign Trade Zone Complex across Highway 302 in Building C.

At left, Ed Wiseman of FAA Air Traffic Control, Joe Stuppliello of FAA Flight Standards District Office, Jim Weaver of FAA Airway Facilities, and Bob Waddle of Columbia Metropolitan Airport, cut the ribbon.

FAA FSDO have new office hours, too. Their office hours for the general public are from 8:30 a.m. to 3:30 p.m. Monday, Wednesday, Friday, and by appointment on Tuesday and Thursday.

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